

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

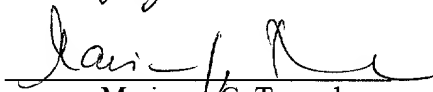
Applicant: Rodemer *et al.*
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MOUNTING

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Marianne G. Tarczal

PRELIMINARY AMENDMENT A

In the Specification:

Please delete the first full paragraph on page 2 consisting of: "This object is achieved by the features indicated in the independent claims. Further improvements of the invention are characterized in the dependent claims." and insert the following in its place:

This invention features a microphone mounting for a hands-free system in a vehicle having a seatbelt with a deflection triangle including a microphone, and a microphone carrier to hold the microphone in an operative position near the head of a person speaking on the phone, the microphone carrier connected to the seat belt of the automotive vehicle such that when the belt is fastened, the microphone rests in the neck-shoulder portion of the person.

The microphone carrier may be a sheath which is mounted on the deflection triangle of the seat belt and through which the seatbelt passes freely. The sheath may be formed by two flat sleeves each having a free end, the sleeves displaced relative to one another in telescopic fashion and fixed, one of the sleeves hinged at its free end to the deflection triangle, the microphone received on the other sleeve. The sleeves may be locked relative to one another by a snap-type device.

The microphone may have a directional characteristic whose sensitivity maximum in the operative position is directed towards the mouth of the person speaking on the phone. The microphone carriers may be provided on the seatbelts of a plurality of seats.

This invention also features a hands-free microphone for mounting on the seatbelt of a vehicle, wherein the microphone is provided at the portion of the microphone facing the seatbelt with contacts for contacting counter-contacts provided on the seatbelt and connected to conducting wires integrated into the seatbelt.

The hands-free microphone may include fastening plates arranged at both sides of the seatbelt and connected to one another through an opening in the seatbelt in a non-rotational manner with respect to the seatbelt, said counter-contacts mounted on the fastening plate at the microphone side and connected through said fastening plate to said conducting wires. The connection between the fastening plates may be a crimp connection. The counter-contacts may be formed by contact plates which are connected to the conducting wires by crimp lugs, the conducting wires guided out of the seatbelt through the fastening plate.

The microphone may include a cup-shaped housing which accommodates a microphone capsule, the microphone capsule formed in the bottom of the cup-shaped housing with a speech opening and which can be locked on the edge of the cup-shaped housing via a groove/bead connection to the fastening plate carrying the counter-contacts. The microphone

contacts may be contact springs.

There may be a plurality of microphones are arranged along the seatbelt and connected to a selection circuit which selects the microphone for transmission that supplies the signals best suited for speech communication according to predetermined criteria. The selection circuit may include a microphone change-over switch, the position of which is defined by the belt extension length. The belt extension length may be determined by measuring the belt roll diameter or rotation angle.

Marked up copies of the relevant page of the specification is included herewith, indicating the above amendments.

In the claims:

Please delete claims 1-15.

Please add new claims 16-30 as follows:

16. A microphone mounting for a hands-free system in a vehicle having a seatbelt with a deflection triangle comprising: a microphone, and a microphone carrier to hold the microphone in an operative position near the head of a person speaking on the phone, said microphone carrier connected to the seat belt of the automotive vehicle such that when the belt is fastened the microphone rests in the neck-shoulder portion of the person.

17. The microphone mounting according to claim 16, wherein said microphone carrier is a sheath which is mounted on the deflection triangle of the seat belt and through which the seatbelt passes freely.

18. The microphone mounting according to claim 17, wherein said sheath is formed by two flat sleeves each having a free end, said sleeves displaced relative to one another in telescopic fashion and fixed, one of said sleeves hinged at its free end to said deflection triangle, said microphone received on said other sleeve.

19. The microphone mounting according to claim 18, wherein said sleeves can be locked relative to one another by a snap-type device.

20. The microphone mounting according to claim 16, wherein said microphone has a directional characteristic whose sensitivity maximum in the operative position is directed towards the mouth of the person speaking on the phone.

21. The microphone mounting according to claim 16, wherein said microphone carriers are provided on the seatbelts of a plurality of seats.

22. A hands-free microphone for mounting on the seatbelt of a vehicle, wherein said microphone is provided at the portion of the microphone facing the seatbelt with contacts for contacting counter-contacts provided on the seatbelt and connected to conducting wires integrated into the seatbelt.

23. The hands-free microphone according to claim 22, further including fastening plates arranged at both sides of the seatbelt and connected to one another through an opening in the seatbelt in a non-rotational manner with respect to the seatbelt, said counter-contacts mounted on the fastening plate at the microphone side and connected through said fastening

plate to said conducting wires.

24. The hands-free microphone according to claim 23, wherein the connection between said fastening plates is a crimp connection.

25. The hands-free microphone according to claim 23, wherein said counter-contacts are formed by contact plates which are connected to said conducting wires by crimp lugs, said conducting wires guided out of the seatbelt through said fastening plate.

26. The hands-free microphone according to claim 23, wherein said microphone further includes a cup-shaped housing which accommodates a microphone capsule, said microphone capsule formed in the bottom of said cup-shaped housing with a speech opening and which can be locked on the edge of the cup-shaped housing via a groove/bead connection to said fastening plate carrying said counter-contacts.

27. The hands-free microphone according to claim 22, wherein said microphone contacts are contact springs.

28. The hands-free microphone according to claim 22, wherein a plurality of microphones are arranged along the seatbelt and connected to a selection circuit which selects the microphone for transmission that supplies the signals best suited for speech communication according to predetermined criteria.

29. The hands-free microphone according to claim 28, wherein said selection

circuit comprises a microphone change-over switch, the position of which is defined by the belt extension length.

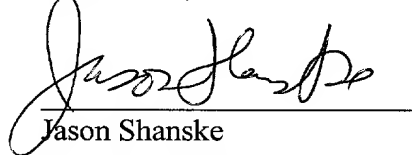
30. The hands-free microphone according to claim 29, wherein said belt extension length is determined by measuring the belt roll diameter or rotation angle.

REMARKS

Preliminarily to the examination of the above-identified patent application, applicants submit herewith an amendment to the specification. No new matter has been added.

If for any reason this Preliminary Amendment is found to be incomplete, or if at any time it appears that a telephone conference with counsel would help advance prosecution, please telephone the undersigned or his associates, collect in Waltham, Massachusetts, at (781) 890-5678.

Respectfully submitted,



Jason Shanske
Reg. No. 43,915



This invention features a microphone mounting for a hands-free system in a vehicle having a seatbelt with a deflection triangle including a microphone, and a microphone carrier to hold the microphone in an operative position near the head of a person speaking on the phone, the microphone carrier connected to the seat belt of the automotive vehicle such that when the belt is fastened, the microphone rests in the neck-shoulder portion of the person.

The microphone carrier may be a sheath which is mounted on the deflection triangle of the seat belt and through which the seatbelt passes freely. The sheath may be formed by two flat sleeves each having a free end, the sleeves displaced relative to one another in telescopic fashion and fixed, one of the sleeves hinged at its free end to the deflection triangle, the microphone received on the other sleeve. The sleeves may be locked relative to one another by a snap-type device.

The microphone may have a directional characteristic whose sensitivity maximum in the operative position is directed towards the mouth of the person speaking on the phone. The microphone carriers may be provided on the seatbelts of a plurality of seats.

This invention also features a hands-free microphone for mounting on the seatbelt of a vehicle, wherein the microphone is provided at the portion of the microphone facing the seatbelt with contacts for contacting counter-contacts provided on the seatbelt and connected to conducting wires integrated into the seatbelt.

The hands-free microphone may include fastening plates arranged at both sides of the seatbelt and connected to one another through an opening in the seatbelt in a non-rotational manner with respect to the seatbelt, said counter-contacts mounted on the fastening plate at the microphone side and connected through said fastening plate to said conducting wires. The connection between the fastening plates may be a crimp connection. The counter-contacts may be formed by contact plates which are connected to

the conducting wires by crimp lugs, the conducting wires guided out of the seatbelt through the fastening plate.

The microphone may include a cup-shaped housing which accommodates a microphone capsule, the microphone capsule formed in the bottom of the cup-shaped housing with a speech opening and which can be locked on the edge of the cup-shaped housing via a groove/bead connection to the fastening plate carrying the counter-contacts. The microphone contacts may be contact springs.

There may be a plurality of microphones are arranged along the seatbelt and connected to a selection circuit which selects the microphone for transmission that supplies the signals best suited for speech communication according to predetermined criteria. The selection circuit may include a microphone change-over switch, the position of which is defined by the belt extension length. The belt extension length may be determined by measuring the belt roll diameter or rotation angle.

put into use it will automatically be moved into a position in which it can be used without any problems and without presenting any obstacle or being disturbing in another way.

Insert
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~~This object is achieved by the features indicated in the independent claims.
Further improvements of the invention are characterized in the dependent claims.~~

Thanks to the installation of the microphone on the seat belt in accordance with the invention the microphone automatically moves – while the seat belt is being fastened - into a position in which it is located near the driver's mouth in an operative position without requiring an irritating arm-type construction or the like. When the belt is unfastened the microphone is suspended in the area of the door post (B-pillar) where it does also not present an obstacle and where it is protected in addition.

An expedient development of the invention consists in arranging the microphone in a sheath through which the belt passes so that it can be moved on the belt into the most advantageous position. It is of particular advantage when the sheath is fastened to the upper deflection triangle of the holding belt so that it does not slip at random on the belt. For adjusting the optimum position relative to the driver's mouth the sheath may be designed as a two-part construction in the manner of a telescope so that the microphone can be adjusted within an adjustment range by shortening or extending the telescope to the optimum position which can be fixed either by a correspondingly rigid guidance of the two telescope sleeves or by a locking device provided thereinbetween. The sleeves are advantageously of a flat rectangular cross-section matching the belt, so that they are hardly noticed and can be produced at low costs from a plastic material.

In another embodiment of the invention the use of metal filaments or strands woven into the belt offers the possibility of an expedient design of the microphone